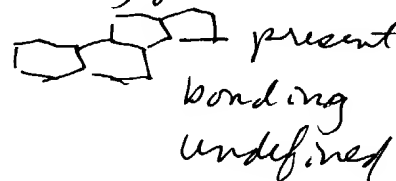


all references applicant polyichene polymerase term
 AKHAVAN 09/871,602

=> d que 111

L1 4436 SEA FILE=REGISTRY ABB=ON PLU=ON PION/PCT
 L2 159 SEA FILE=REGISTRY ABB=ON PLU=ON L1 AND P/ELS
 L4 147 SEA FILE=REGISTRY ABB=ON PLU=ON L2 AND O>3
 L6 8 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND C5-C6-C6-C6/ES
 L7 1 SEA FILE=REGISTRY ABB=ON PLU=ON L6 AND C=37
 L11 3 SEA FILE=CAPLUS ABB=ON PLU=ON L7 3 cites

*all polymers w/ quat. N in backbone
 polymer has phosphorus
 at least 2 oxygens*



=> d ibib abs hitstr 111 1-3

L11 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:350577 CAPLUS

DOCUMENT NUMBER: 138:112291

TITLE: Biodegradable poly(phosphoester) for oral gene delivery

AUTHOR(S): Wen, J.; Kiang, T.; Mao, H.-Q.; Leong, K.-W.

CORPORATE SOURCE: Department of Biomedical Engineering, Johns Hopkins

School of Medicine, Baltimore, MD, 21205, USA

SOURCE: Proceedings - 28th International Symposium on Controlled Release of Bioactive Materials and 4th Consumer & Diversified Products Conference, San Diego, CA, United States, June 23-27, 2001 (2001), Volume 2, 1209-1210. Controlled Release Society: Minneapolis, Minn.

CODEN: 69CNY8

DOCUMENT TYPE: Conference

LANGUAGE: English

AB A new biodegradable amphiphilic poly(phosphoester) with pos. charges in the backbone and cholesterol as the side chain has been evaluated as non-viral vector for oral gene delivery.

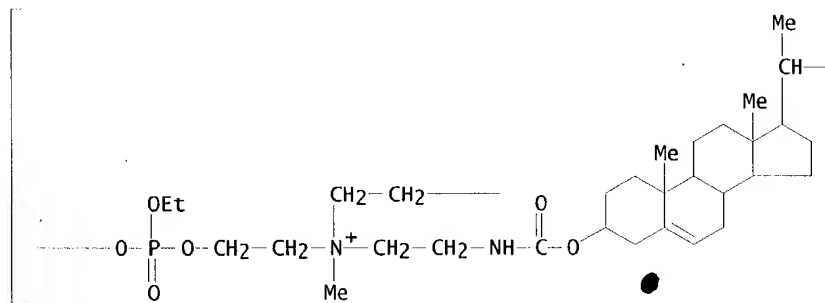
IT 329351-01-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (biodegradable poly(phosphoester) for oral gene delivery)

RN 329351-01-1 CAPLUS

CN Poly[oxy(ethoxyphosphinylidene)oxy-1,2-ethanediyl][2-[[[(3.beta.)-cholest-5-en-3-yloxy]carbonyl]amino]ethyl]methyliminio]-1,2-ethanediyl iodide] (9CI) (CA INDEX NAME)

PAGE 1-A



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— (CH₂)₃—CHMe₂

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REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:885716 CAPLUS

DOCUMENT NUMBER: 136:25102

TITLE: Cholesterol phosphate polymers for drug delivery and

INVENTOR(S): ~~gene transfer~~ Leong, Kam; Jie, Wen; Zhuo, Ren-xi; Mao, Hai-quan

PATENT ASSIGNEE(S): The Johns Hopkins University, USA

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

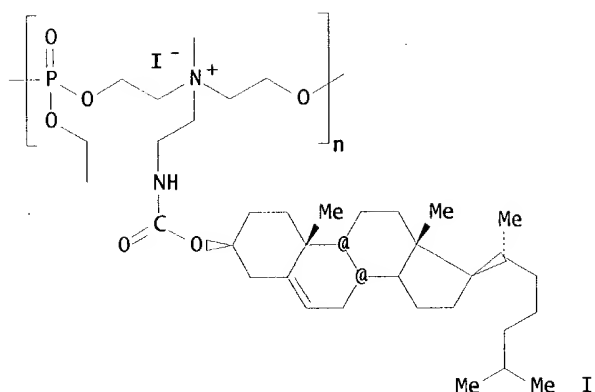
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091725	A2	20011206	WO 2001-US17613	20010531
WO 2001091725	A3	20020328		
WO 2001091725	C2	20030206		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 2002045263	A1	20020418	US 2001-871602	20010531
PRIORITY APPLN. INFO.:			US 2000-208262P	P 20000531

GI



AB The present invention provides biodegradable polymers, polymer compns., particles composed thereof and methods of using same for the controlled release of a biol. active substance to a specified tissue or cells. Preferred polymers include biodegradable, amphiphilic polyphosphates which are capable of complexing one or more biol. active substances. Preferred methods include the controlled release of biol. active substances and gene therapy using polymers and nanoparticles composed thereof. I was prepd. and micelles of I were prepd. as well as a I-plasmid DNA complex.

IT 329351-01-1P

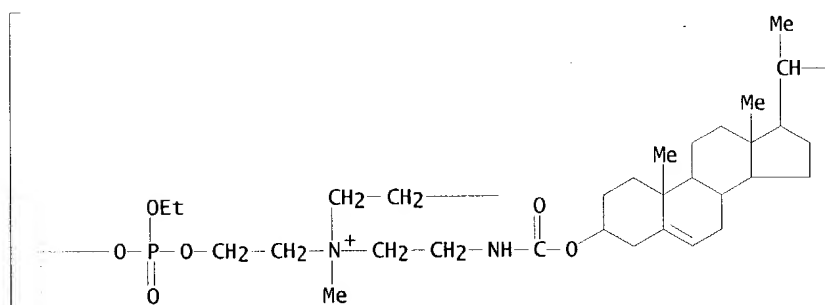
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cholesterol phosphate polymers for drug delivery and gene transfer)

RN 329351-01-1 CAPLUS

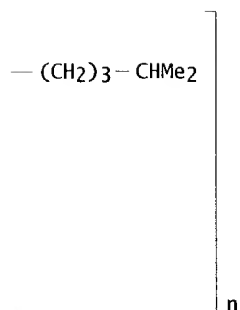
CN Poly[oxy(ethoxyphosphinylidene)oxy-1,2-ethanediyl][[2-[[[(3.beta.)-cholest-5-en-3-yl]oxy]carbonyl]amino]ethyl]methyliminio]-1,2-ethanediyl iodide]
(9CI) (CA INDEX NAME)

PAGE 1-A



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PAGE 1-B

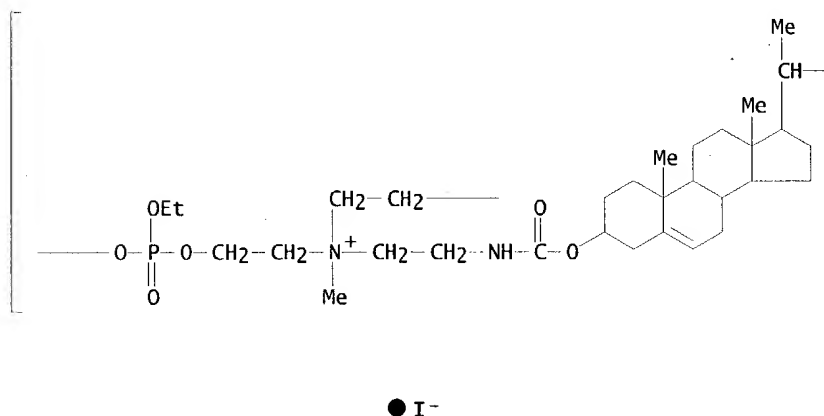


IT 329351-01-1DP, conjugates with DNA
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (cholesterol phosphate polymers for drug delivery and gene transfer)

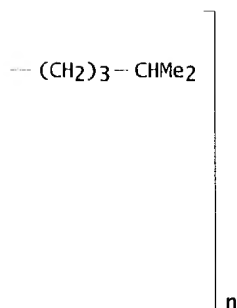
RN 329351-01-1 CAPLUS

CN Poly[oxy(ethoxyphosphinylidene)oxy-1,2-ethanediyl][[2-[[[(3.beta.)-cholest-5-en-3-yl]oxy]carbonyl]amino]ethyl]methyliminio]-1,2-ethanediyl iodide]
 (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L11 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:672335 CAPLUS

DOCUMENT NUMBER: 134:242519

TITLE: Novel biodegradable polyphosphoester micelles as gene carriers

AUTHOR(S): Mao, H. -Q.; Wen, J.; Lin, K. Y.; Li, W.; Leong, K. W.

CORPORATE SOURCE: Department of Biomedical Engineering, The Johns Hopkins School of Medicine, Baltimore, MD, 21205, USA

SOURCE: Proceedings of the International Symposium on Controlled Release of Bioactive Materials (2000), 27th, 822-823

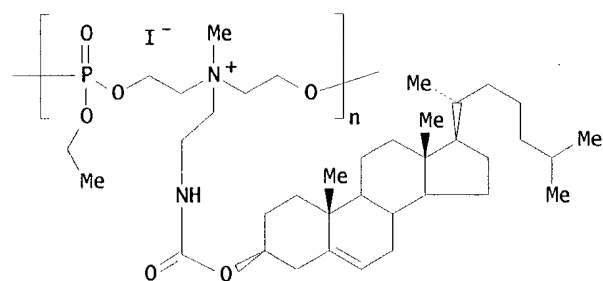
CODEN: PCRMEY; ISSN: 1022-0178

PUBLISHER: Controlled Release Society, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Micelles composed of a new biodegradable polyphosphoester, poly[[[cholesteryl oxocarbonylamidoethyl)methyl]bis(ethylene)ammonium iodide] Et phosphate (I), are proposed as a gene carrier. Carrying a pos. charge in the backbone and a lipophilic cholesterol structure in the side chain, I self-assembles into micelles in aq. buffer at room temp., which can then be used to complex with plasmid DNA.

IT 329351-01-1P

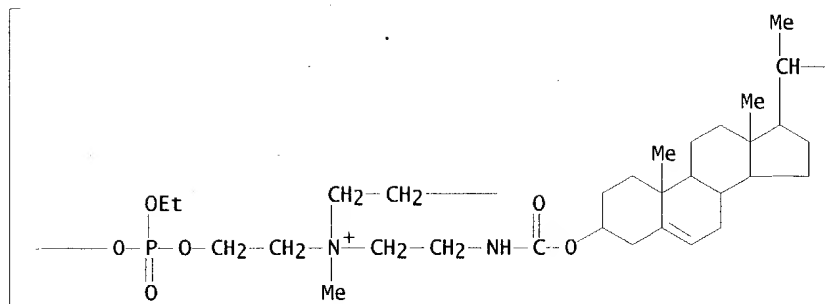
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(biodegradable polyphosphoester micelles as gene carriers)

RN 329351-01-1 CAPLUS

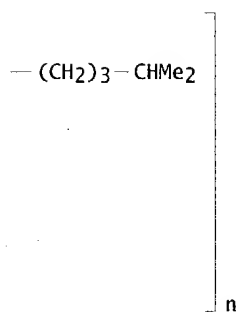
CN Poly[oxy(ethoxyphosphinyldiene)oxy-1,2-ethanediyl[[2-[[[(3.beta.)-cholest-5-en-3-yloxy]carbonyl]amino]ethyl]methyliminio]-1,2-ethanediyl iodide] (9CI) (CA INDEX NAME)

PAGE 1-A



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PAGE 1-B



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT